

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: AO23-01-BAC **Atlantic Ocean Beaches - Croatan**

Location: This cause encompasses the Croatan Beach along shore of City of Virginia Beach. VDH bathing beach areas.

City / County: Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired for Croatan Beach based on Enterococcus bacteria data from the VDH-Beach station VA723069 (1 viol. / 26 Geo-mean obs.) along with multiple swimming advisories between the years 2009-2014. In 2014, Tidewater beaches experienced a wide spread precipitation event on Sept 8 with a total of 5 inches of rainfall. Since the event is within the last two years of the assessment period, the beach will be listed in the 2016 IR as impaired.

Atlantic Ocean Beaches - Croatan

Recreation

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Enterococcus - Total Impaired Size by Water Type:

0.410

Sources:

Wet Weather Discharges (Non-Point Source)



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C01E-17-PCB **Chesapeake Bay and Tidal Tributaries**

Location: Chesapeake Bay mainstem and its small coastal tidal tributaries

City / County: Accomack Co. Chesapeake Bay - Co Otho Nates Applicable. Lancaster Co. Mathews Co.

Middlesex Co. Norfolk City Northampton Co. Northumberland Co. Poquoson City.

Virginia Beach City York Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Chesapeake Bay and its small coastal tidal tributaries are included under the 12/13/2004 VDH Fish Consumption Advisories for PCBs. No more than 2 meals/month are recommended of anadromous (coastal) striped bass.

Also, VDH issued additional fish consumption advisory for PCBs in the Mobjack Bay and its tributaries, particularly the East, West, and Ware Rivers (on 12/13/2004) and in the Piankatank River from Rt. 17 to Deep Point Boat Landing (10/7/2009). No more than two meals/month of gizzard shad are recommended.

The advisories are based on the results of DEQ's fish tissue monitoring program, which show elevated PCBs levels in several monitoring sites within the basin, including:

7-GWR007.97 in the Great Wicomico River

7-COC000.40 in Cockrell Creek

7-IND001.80 in Indian Creek

7-DYM000.00 in Dymer Creek

7-PNK019.85 in the Piankatank River

7-MLF002.45 in Milford Haven

7-WIN000.88 in Winter Harbor

7-EST002.65 in the East River

7-NOR003.65 in the North River

7-WAR005.77 in the Ware River

Chesapeake Bay and Tidal Tributaries

Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Fish Consumption**

PCB in Fish Tissue - Total Impaired Size by Water Type: 1,825.592

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C01R-01-BAC Crabbe Mill Stream

Location: The nontidal mainstem of Crabbe Mill Stream.

City / County: Northumberland Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2012 cycle, Crabbe Mill Stream was impaired of the Recreation Use due to an E. coli exceedance rate of 2/12 at 7-CMS002.00, which is located at Route 201.

Although Crabbe Mill Stream is within the TMDL study area for the Great Wicomico River Shellfish Bacterial TMDL, there is a VPDES discharger which drains to the stream that was not addressed in the TMDL; therefore, the impairment cannot be nested.

Crabbe Mill Stream Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

3.90

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C01R-01-DO Crabbe Mill Stream

Location: The nontidal mainstem of Crabbe Mill Stream.

City / County: Northumberland Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2012 cycle, Crabbe Mill Stream was impaired of the Aquatic Life Use due to a dissolved oxygen violation rate of 3/14 at 7-CMS002.00. Monitoring at 7-CMS000.12 was acceptable (1/17).

Crabbe Mill Stream

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

3.90

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C01R-01-PH Crabbe Mill Stream

Location: The nontidal mainstem of Crabbe Mill Stream.

City / County: Northumberland Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

During the 2012 cycle, Crabbe Mill Stream was impaired of the Aquatic Life Use due to pH violation rates of 2/17 at 7-CMS000.12 and 2/14 at 7-CMS002.00.

Crabbe Mill Stream

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

3.90

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C01R-02-BEN Dymer Creek

Location: The nontidal mainstem of Dymer Creek

City / County: Lancaster Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

During the 2014 cycle, nontidal Dymer Creek was impaired of the Aquatic Life Use due to an impacted benthic community at 7-DYM003.52, which is located at the Route 200 bridge.

Dymer Creek

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.06

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C02R-03-HG Dragon Swamp/Piankatank River

Location: Dragon Swamp and the Piankatank River from the headwaters near the State Route 620 bridge downstream to Deep Point

Boat Landing (Rt. 606) across from Piankatank Shores.

City / County: Essex Co. Gloucester Co. King And Queen Co. Middlesex Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Dragon Swamp and the Piankatank River are considered impaired of the Fish Consumption Use based on DEQ monitoring which has indicated elevated levels of mercury in largemouth bass.

Mercury exceedances at:

7-DRN003.40

7-DRN001.43

7-PNK017.47

7-PNK020.42

A portion of this area was considered fully supporting but threatened in 2002 based on these results. VDH subsequently issued a fish consumption advisory and the stream was downgraded to impaired.

In July 2005, VDH extended the Fish Consumption Advisory boundary to include the entire length of Dragon Swamp from the headwaters near Rt. 620 downstream to Deep Point Boat Landing. No more than two meals/month of largemouth bass are recommended.

Dragon Swamp/Piankatank River Estuary
Fish Consumption (Sq. Miles)

Estuary Reservoir (Sq. Miles) (Acres)

River (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

2.722

31.97

Sources:

Atmospheric Deposition -

Source Unknown

Toxics



Chesapeake Bay/Atlantic/Small Coastal Basins Cause Group Code: C03E-10-EBEN Piankatank River

Location: Piankatank River / Dragon Swamp tidal mainstem

City / County: Gloucester Co. Mathews Co. Middlesex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Estuarine Bioassessments / 5A

During the 2006 cycle, the Piankatank River from Pond Point to just upstream of Iron Point was impaired of the Aquatic Life Use based on information collected from the Coastal 2000 station 7-PNK005.20 in 2003.

During the 2008 cycle, Coastal 2000 monitoring in 2004 at station 7-PNK005.35 also indicated benthic impairment. In addition, during the 2008 cycle, estuarine probabilistic monitoring was conducted at Coastal 2000 station 7-PNK010.41. The data was assessed by DEQ's Central Office staff who assessed the area around Berkley Island as impaired due to alteration of the benthic community (C03E-14-EBEN due 2020).

During the 2014 cycle, the entire mainstem Piankatank River/Dragon Swamp was impaired of the Aquatic Life Use based on the Chesapeake Bay Benthic Index of Biological Integrity. The impairment will be expanded. The TMDL due date is 2018 to reflect the earliest benthic impairment within the segment.

In addition, 2011 monitoring at Coastal 2000 station 7BPNK003.14 indicated benthic impairment. There is a high potential of chronic effects due to sediment PAHs.

During the 2016 cycle, benthic impairment was noted at Coastal 2000 estuarine probabilistic monitoring station 7BPNK016.89 (Category 5A, scenario 8.)

Piankatank River

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Estuarine Bioassessments - Total Impaired Size by Water Type: 19.497

Sources:

Changes in Ordinary Stratification and Bottom Water Hypoxia/Anoxia Contaminated Sediments Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins Cause Group Code: C03E-16-BAC Piankatank River

Location: River's bend around Berkley Island

City / County: Middlesex Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

During the 2014 cycle, the Piankatank River around Berkley Island was impaired of the Recreation Use due to an enterococci exceedance rate of 4/12 at 7-PNK010.39, which is located at the end of Route 630.

Piankatank River

Estuary Reservoir River

Recreation (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.785

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C03E-17-BAC Piankatank River

Location: One-half mile radius around monitoring station 7-PNK005.36 on the Piankatank River between Pond Point and Iron Point.

City / County: Mathews Co. Middlesex Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

During the 2016 cycle, the segment was impaired of the Recreation Use due to an enterococci exceedance rate of 2/11 at 7-PNK05.78, which is located at the Route 630 boat ramp.

Piankatank River

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 1.167

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C04E-53-BAC Whites Creek - Festival Beach

Location: Whites Creek at Festival Beach

City / County: Mathews Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

During the 2012 cycle, Whites Creek at Festival Beach was mistakenly impaired of the Recreation Use due to 7 short-term swimming advisories during the 2010 swim season. The advisories were limited to 1-3 days in length and therefore are not appropriate for listing.

During the 2016 cycle, there were no beach closures of a week or more duration. However, there were two exceedances of the bacteria geometric mean during the 2016 cycle and the beach will remain listed.

Whites Creek - Festival Beach
Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.046

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C04R-01-DO East River

Location: Nontidal mainstem of the East River.

City / County: Mathews Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2012 cycle, the nontidal East River was impaired of the Aquatic Life Use due to a dissolved oxygen exceedance rate of 4/12 at 7-EST008.71, which is located at Rt. 14.

East River

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

0.59

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2016



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C04R-01-PH East River

Location: Nontidal mainstem of the East River.

City / County: Mathews Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

During the 2012 cycle, the nontidal East River was impaired of the Aquatic Life Use due to a pH exceedance rate of 8/12 at 7-EST008.71, which is located at Rt. 14.

East River

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

0.59

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C07E-01-PCB Chesapeake Bay & Tidal Tributaries VDH Fish Consumption Advisory for

PCB₅

Location: This cause encompasses the Chesapeake Bay & Tidal Tributaries within the lower bay.

City / County: Hampton City Poquoson City. York Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for PCBs fish tissue contamination within

the Chesapeake Bay issued 12/13/04. Previous Use ID (2006 IR) as TMDL ID: VDH-Bay PCBs.

Chesapeake Bay & Tidal Tributaries VDH Fish Consumption Advisory for PCBs

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fish Consumption

PCB in Fish Tissue - Total Impaired Size by Water Type:

16.028

8

(IVIIIes)

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C07E-33-EBEN Northwest Br. Back River - Upper near Marsh Point

Location: This cause encompasses the impairment located in the Northwest Branch Back River - Upper portion near Marsh Point.

This cause encompasses the benthic community related to the ProbMon station 7-NWB002.18.

City / County: Hampton City Poquoson City.

Use(s): Aquatic Life

Cause(s) /

VA Category: Estuarine Bioassessments / 5A

The Aquatic Life Use is impaired based on failure to meet a statistical evaluation constituting an un-impacted benthic organism population per benthic community structure analysis. There is no source/stressor currently identified as source for the impairment. Probable effects (chronic and acute) of sediment contamination - pesticides (DDT exceeded ERM), metals and

Northwest Br. Back River - Upper near Marsh Point

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Estuarine Bioassessments - Total Impaired Size by Water Type:

0.248

Sources:

Aquatic Life

Source Unknown



River

(Miles)

(Sq. Miles)

(Acres)

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C07E-38-SF Bennett Creek - Upper (DSS 06-IR)

Location: This cause encompasses the Bennett Creek upstream portion (S of Poquoson R mouth) tributary to Poquoson River. From

end of tidal waters downstream 0.1 mi. CBP Segment MOBPH.

City / County: Poquoson City.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfish Use is impaired based on DSS Condemnation # 053-222 E (effective date 20120823).

Bennett Creek - Upper (DSS 06-IR) Estuary Reservoir

Shellfishing Fecal Coliform - Total Impaired Size by Water Type: 0.039

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C07E-41-SF Unsegmented estuaries in Back River - DSS

Location: This cause encompasses the non segmented areas of C07E. CBP Segment MOBPH.

City / County: Hampton City Poquoson City. York Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is impaired based on the DSS Condemnation # 054-021 B (effective date 20141031).

Unsegmented estuaries in Back River - DSS

Shellfishing (Sq. Miles) (Acres)

Fecal Coliform - Total Impaired Size by Water Type: 0.097

Estuary

Reservoir

River (Miles)

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C07E-43-BAC Buckroe Beaches

Location: This cause encompasses the area northeast of Buckroe Beach southwest to parallel with start of Mill Cr. Portion of CBP

Segment CB8PH. No DSS shellfish condemnations.

City / County: Hampton City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus bacteria data from the VDH-Beach station VA884979 (1 viol. / 23 Geomean obs.) along with multiple swimming advisories between the years 2009-2014. This is a new impairment for the Buckroe Beach. Tidewater beaches experienced a wide spread precipitation event on Sept 8 with a total of 5 inches of rainfall. Since the event is within the last two years of the assessment period, the beach will be listed in the 2016 IR as impaired.

Buckroe Beaches

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.224

Sources:

Urban Runoff/Storm Sewers Wet Weather Discharges

(Non-Point Source)

Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C07L-01-CU Harwood Mills Reservoir

Location: This cause encompasses the Harwood Mills Reservoir, portion of Poguoson River upstream of dam @ RM 5.7, PWS for

York County.

City / County: York Co.

Wildlife Use(s): Aquatic Life

Cause(s) /

VA Category: Copper / 5A

The Aquatic Life and Wildlife impairments are carried from 2004 IR, due water column copper exceedances of the freshwater acute criteria (data supplied by USGS @ station 01677850 - surface layer in September 2002). Exceedance of Cu freshwater acute criteria at violation rate of 100% (3 violates / 3 surface obs.).

Harwood Mills Reservoir River **Estuary** Reservoir (Sq. Miles) (Acres) (Miles) Wildlife

> Copper - Total Impaired Size by Water Type: 515.36

Sources:

Municipal (Urbanized High

Density Area)

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C07L-02-DO Harwoods Mill Reservoir (PWS)

Location: This cause encompasses the Harwood Mills Reservoir, portion of Poquoson River upstream of dam @ RM 5.7. PWS for

York County.

City / County: York Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired in the 2016 IR for DO. The pooled DO violation rate is 14.4% with 13 viol / 90 obs. Individual station violations are 7-POQ005.72 @ 9/51 and 7-POQ006.84 @ 4/39. Previously in the 2014 IR, the DO was delisted based on a violation rate 8.3%. The DO was initially listed in 2004 with a CGC VAT-C07L-01-DO.

Harwoods Mill Reservoir (PWS)

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

257.68

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C07R-01-DO Newmarket Creek - Lower Riverine

Location: This cause encompasses Newmarket Creek from 0.1 mi. below Chestnut Ave. downstream to 0.65 mi. below Aberdeen Rd.

crossing. Lowermost riverine portion, prior to start of tidal influence. In area of Mount Olive Cemetery.

City / County: Hampton City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired based on data for DO at station 7-NEW005.44 with 3 viol / 12 obs.

Newmarket Creek - Lower Riverine Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

2.01

Sources:

Municipal (Urbanized High

Density Area)

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08E-01-EBEN London Bridge Creek

Location: This cause encompasses the entirety of creek, from headwaters near Shipps Corner downstream to Rt. 58 crossing. CBP

segment LYNPH. BIBI segment LYNPHa. DSS # 070-025 A (effective 20120412).

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Estuarine Bioassessments / 5A

The Aquatic Life Use is impaired based on failure to meet a statistical evaluation constituting an un-impacted benthic organism population per CBP (Benthic-BIBI) analysis. The source/stressor tool identified sediment contaminants as source for the impairment.

impairment.

London Bridge Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Estuarine Bioassessments - Total Impaired Size by Water Type: 7.976

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Sources:

Contaminated Sediments



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08E-01-PCB Eastern Branch -Lynnhaven River System VDH Fish Consumption

Advisory

Location: This cause encompasses the Eastern Branch of the Lynnhaven River System and Chesapeake Bay Beaches.

City / County: Norfolk City Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for Chesapeake Bay and tidal tributaries

for PCBs issued 12/13/04 and updated 10/07/2009.

Eastern Branch - Lynnhaven River System VDH Fish Consumption Advisory

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

3.833

(IVIIIes)

Sources:

Source Unknown

Fish Consumption



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08E-14-BAC Sara Constance Park, East End

Location: This cause encompasses the area located along Chesapeake Bay, in Norfolk. Portion of CBP segment CB8PH. No DSS

shellfish direct harvesting condemnations present.

City / County: Norfolk City Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on data from the VDH Beach Monitoring Program geometric mean violation, swimming advisories and joint VDH-DEQ assessment review at Sara Constance Park VDH station VA742733 and Ocean View Park Beach station VA509547. Stations exceeds the monthly geometric mean in 9/2014 (1 viol / 25 mos geomean obs). Tidewater beaches experienced a wide spread precipitation event on Sept 8 with a total of 5 inches of rainfall. Since the event is within the last two years of the assessment period, the beach will be listed in the 2016 IR as impaired.

Sara Constance Park, East End

e Park, East End Estuary (Sq. Miles)

Enterococcus - Total Impaired Size by Water Type: 0.140

Reservoir

(Acres)

River

(Miles)

Sources:

Recreation

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08E-15-BAC 13th View Beach

Location: This cause encompasses the area along Chesapeake Bay, in Norfolk. Portion of CBP segment CB8PH. No DSS shellfish

direct harvesting condemnations present.

City / County: Norfolk City Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired in the 2016 IR based on Enterococcus bacteria data from the VDH-Beach station VA845980 (1 viol. / 23 Geo-mean obs.) along with multiple swimming advisories between the years 2009-2014. The Monthly Geometric Mean violation occurred in July 2013 with no storm event to associate with the exceedance therefore 13th View Beach is newly listed as impaired in the 2016 IR.

13th View Beach

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.353

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08E-16-BAC Chicks Beach

Location: This cause encompasses the area along Chesapeake Bay near Chesapeake Bay Bridge Tunnel, in cities of Norfolk and

Virginia Beach. Portion of CBP segment CB8PH. No DSS shellfish direct harvesting condemnations present.

City / County: Norfolk City Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is not supported based on data from the VDH Beach Monitoring Program and joint VDH-DEQ assessment review at Chicks Beach Station VA718451. There is 1 geo mean viol in Sept of 2014 out of 25 obs within the 2016 IR. This is a new impairment for Chicks Beach. Tidewater beaches experienced a wide spread precipitation event on Sept 8 with a total of 5 inches of rainfall. Since the event is within the last two years of the assessment period, the beach will be listed in the 2016 IR as impaired.

Chicks Beach

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.433

Sources:

Wet Weather Discharges (Non-Point Source)

Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-01-CHLA Lake Whitehurst

Location: This cause encompasses the entirety of Lake Whitehurst, from Rt. 60 south to the border of Norfolk Intl Airport. City of

Norfolk PWS.

City / County: Norfolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Chlorophyll-a / 5A

Aquatic Life Use is impaired for nutrients. 2016 Lake Whitehurst pooled nutrient results: 1 viol/ 1 obs Chla & TP 2011 (IM). The 2008 second year of nutrients data dropped out of the assessment window. 2014Lake Whitehurst pooled nutrient results: 2

viol / 2 obs Chla & TP 2008, 2011 (IM).

Lake Whitehurst Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Chlorophyll-a - Total Impaired Size by Water Type:

482.28

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-01-DO **Lake Whitehurst**

Location: This cause encompasses the entirety of Lake Whitehurst, from Rt. 60 south to the border of Norfolk Intl Airport. City of

Norfolk PWS.

City / County: Norfolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Aquatic Life Use is impaired for DO. The Aquatic Life Use impairment is retained for 2016. Most of the data dropped off this assessment cycle. The pooled dissolved oxygen concentration measurements (13 violates / 93 obs.) below the minimum criteria (4.0 mg/L) reported from the pooled data at all monitoring lake stations sampled during the current cycle.

Lake Whitehurst Reservoir Estuary River (Sq. Miles) (Acres) (Miles) **Aquatic Life**

Oxygen, Dissolved - Total Impaired Size by Water Type:

482.28

Sources:

Residential Districts Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-01-HG Lake Whitehurst

Location: This cause encompasses the entirety of Lake Whitehurst, from Rt. 60 south to the border of Norfolk Intl Airport. City of

Norfolk PWS.

City / County: Norfolk City
Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for Mercury for Lake Whitehurst issued 12/13/04. DEQ (CORE) monitoring at 7-LAW001.00 for fish tissue results have an observed effect for Hg.

Lake Whitehurst Festuary Reservoir

Lake Whitehurst Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type: 482.28

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-01-PCB Lake Whitehurst VDH Fish Consumption Advisory

Location: This cause encompasses the entirety of Lake Whitehurst, from Rt. 60 south to the border of Norfolk Intl Airport. City of

Norfolk PWS.

City / County: Norfolk City
Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for PCBs for Lake Whitehurst issued 12/13/04 modified 10/7/09. DEQ (CORE) monitoring at 7-LAW001.00 for fish tissue results exceeded DEQ-SV for PCBs.

Lake Whitehurst VDH Fish Consumption Advisory

Fish Consumption

PCB in Fish Tissue - Total Impaired Size by Water Type:

(Sq. Miles) (Acres)

Estuary

River (Miles)

482.28

Reservoir

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-01-TP Lake Whitehurst

Location: This cause encompasses the entirety of Lake Whitehurst, from Rt. 60 south to the border of Norfolk Intl Airport. City of

Norfolk PWS.

City / County: Norfolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Phosphorus (Total) / 5A

Aquatic Life Use is impaired for nutrients. 2016 Lake Whitehurst pooled nutrient results: 1 viol/ 1 obs Chla & TP 2011 (IM). The 2008 second year of nutrients data dropped out of the assessment window. 2014 Lake Whitehurst pooled nutrient results: 2 viol / 2 obs Chla & TP 2008, 2011 (IM). Nutrients Impaired- Both Chla & TP assessed since algaecide was applied during monitoring year.

Lake Whitehurst Estuary Reservoir River
Aquatic Life (Sq. Miles) (Acres) (Miles)

Phosphorus (Total) - Total Impaired Size by Water Type: 482.28

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-03-CHLA Little Creek Reservoir

Location: This cause encompasses the upper portion of the lake, beginning at Rt 13 (RM 1.0) downstream to north, ends at lake

terminus @ route 60 (RM 0.0). City of Norfolk PWS.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Chlorophyll-a / 5A

Little Creek is also impaired for nutrients. Both Chla and TP do not support ALUS. Little Creek Reservoir pooled nutrients results: 2 viol / 2 obs Chla & TP 2014, 2011 (IM); Both TP and Chla assessed since algaecide was applied during the

monitoring year.

Little Creek Reservoir

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Chlorophyll-a - Total Impaired Size by Water Type:

199.79

Sources:

Aquatic Life

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-03-PCB Little Creek Reservoir VDH Fish Consumption Advisory

Location: This cause encompasses the upper portion of the lake, beginning at Rt 13 (RM 1.0) downstream to north, ends at lake

terminus @ route 60 (RM 0.0). City of Norfolk PWS.

City / County: Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for PCBs for Little Creek Reservoir issued

12/13/04.

Fish Consumption

Little Creek Reservoir VDH Fish Consumption Advisory

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

199.79

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-03-TP Little Creek Reservoir

Location: This cause encompasses the upper portion of the lake, beginning at Rt 13 (RM 1.0) downstream to north, ends at lake

terminus @ route 60 (RM 0.0). City of Norfolk PWS.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Phosphorus (Total) / 5A

Little Creek is also impaired for nutrients. Both Chla and TP do not support ALUS. Little Creek Reservoir pooled nutrients results: 2 viol / 2 obs Chla & TP 2014, 2011 (IM); Both TP and Chla assessed since algaecide was applied during the

monitoring year.

Little Creek Reservoir

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Phosphorus (Total) - Total Impaired Size by Water Type:

199.79

Sources:

Aquatic Life

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-04-CHLA Lake Smith

Location: This cause encompasses the entirety of Lake Smith. City of Norfolk PWS.

City / County: Norfolk City Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Chlorophyll-a / 5A

Aquatic Life Use is impaired for nutrients.2016 Lake Smith pooled nutrients results: 1 viol/ 1 obs Chla & TP (2011) Nutrients Impaired-Both TP and Chla assessed since algaecide was applied during monitoring year.2014 Lake Smith pooled nutrients

results: 2 viol / 2 obs Chla & TP (2008, 2011)

Lake Smith

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Chlorophyll-a - Total Impaired Size by Water Type: 184.89

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-04-DO Lake Smith

Location: This cause encompasses the entirety of Lake Smith. City of Norfolk PWS.

City / County: Norfolk City Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired due to dissolved oxygen concentration measurements below the minimum criteria (4.0 mg/L). Pooled stations include 7-LAS00.06, 7-LAS001.03, and SM1. Lake Smith's pooled DO violation rate is 1/42 = 2.4%. However, impairment is retained for DO since both 2008 and 2011 data was used to list lake. Now in the 2016 IR the 2008 data is dropped outside of the assessment window and 2011 remains. Need additional data to make delist. Individual station exceedances for DO include 7-LAS00.06 (0/14), 7-LAS001.03 (0/10), SM1 (1/18). Pooled pH data supported use with a lake violation rate of 0/78.

Lake Smith

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

184.89

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-04-TP Lake Smith

Location: This cause encompasses the entirety of Lake Smith. City of Norfolk PWS.

City / County: Norfolk City Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Phosphorus (Total) / 5A

Aquatic Life Use is impaired for nutrients.2016 Lake Smith pooled nutrients results: 1 viol/ 1 obs Chla & TP (2011) Nutrients Impaired-Both TP and Chla assessed since algaecide was applied during monitoring year.2014 Lake Smith pooled nutrients results: 2 viol / 2 obs Chla & TP (2008, 2011).

Lake Smith

Reservoir River

Aquatic Life

Estuary Reservoir (Sq. Miles) (Acres) (Miles)

Phosphorus (Total) - Total Impaired Size by Water Type: 184.89

Sources:

Source Unknown



54.39

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-06-HG Lake Trashmore - Western Pond VDH Fish Consumption Advisory for

Location: This cause encompasses the entirety of Lake Trashmore - Western Pond. Includes western portion of dual ponds lake

system, pond on eastern side of Mt. Trashmore is not included in VDH advisory.

City / County: Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory (Carp and Largemouth Bass) for mercury and PCBs fish tissue contamination (issued 9/30/04 for Hg, 12/13/04 for PCBs) and DEQ (CORE) monitoring at 7-MTL000.20 for fish tissue results exceeded DEQ-SV for Hg and PCBs.08-IM, FT_PCB Largemouth Bass, Perch, Carp, Gizzard Shad, Walleye; 08-IM, FT_Met-Hg Largemouth Bass, Perch

Lake Trashmore - Western Pond VDH Fish Consumption Advisory for Mercury

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-06-PCB Lake Trashmore - Western Pond VDH Fish Consumption Advisory for

Location: This cause encompasses the entirety of Lake Trashmore - Western Pond. Includes western portion of dual ponds lake

system, pond on eastern side of Mt. Trashmore is not included in VDH advisory.

City / County: Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption ban (for Carp) and advisory (for Yellow Perch) for PCBs fish tissue contamination issued 12/13/04. DEQ (CORE) monitoring at 7-LAW001.00 for fish tissue results exceeded DEQ-SV for Hg and PCBs.08-IM, FT_PCB Largemouth Bass, Perch, Carp, Gizzard Shad, Walleye; 08-IM, FT_Met-Hg Largemouth Bass, Perch

Lake Trashmore - Western Pond VDH Fish Consumption Advisory for PCBs

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

54.39

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C08L-07-DO Lake Wright

Location: This cause encompasses the entirety of Lake Wright near South of Norfolk Intl. Airport, south of Rt I-64 adjacent to USAA

Office Park. Sampled by City of Norfolk as PWS.

City / County: Norfolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired due to exceedance of the dissolved oxygen standard measurement below the minimum criteria (4.0 mg/L). Station WRI sampled by City of Norfolk Department of Utilities has 5 viol / 21 obs in 2014 IR and now 4 viol / 8 obs with the data from 2008 and 2007 dropped out of the assessment window.

Lake Wright Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

15.62

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C09R-02-PH Unnamed tributary to Pitts Creek

Location: This cause encompasses the riverine portion of this tributary to Pitts Creek. Includes unnamed tributary (south bank) of this

unnamed tributary to Pitts Creek. Located northwest of New Church in Accomack County.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5A

The Aquatic Life Use is impaired due to low pH (6 violates / 36 obs.; VAT-C09R-02) concentrations at station 7-XAE001.42, which exceed the minimum criteria for this parameter. Although pH impairment from 1998 303d was delisted in the 2004 IR, more recent data indicates impairment and need to re-add pH again as impairment to the TMDL listing. Upstream discharge from Tyson Foods 001 may have impact on this impairment. Also need to investigate if natural conditions (leaf litter/organic content) may be the cause of the low pH.

Unnamed tributary to Pitts Creek

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

pH - Total Impaired Size by Water Type:

7.50

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C10E-02-BAC Muddy Creek - Upper

Location: This cause encompasses the upper portion of Muddy Creek, from end of tidal waters downstream to Pettigrew Bend.

Portion of CBP segment POCMH.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impairment is retained for 2014 IR. Data within assessment window is from 2005 & 2006. Enterococcus bacteria data from 2010 at DEQ AQM station @ 7-MUD002.29 (3 viol / 15 obs.).

Muddy Creek - Upper Estuary Reservoir River Recreation (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.214

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C10R-03-BEN Guilford Creek

Location: This cause encompasses Guilford Creek, from confluence of two branches west of Rt 316 downstream to Rt 658 crossing.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired due to impacts to the stream's benthic population. Assessment is based on biological benthic monitoring noting MI [MI: S&F 05,06] at DEQ (BIO) station @ 7-GLF003.77.

Guilford Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

0.85

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C11E-15-SF Matchotank Creek - Upper

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 080-013 C (effective 20121211).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is impaired due to the DSS shellfish direct harvesting condemnation # 080-013 C (effective 20121211).

No TMDL.

Matchotank Creek - Upper

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

r River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.069

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C11R-01-BAC Joynes Branch

Location: This cause encompasses Joynes Branch, eastern riverine tributary to the Central Branch of Onancock Creek

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use impairment is based on the 2014 data collected at station 7-JOY000.59 with 2 viol / 9 obs. Previously this impairment had been maintained since the data collected was from 2005-2006 with an exceedance of the criteria for E.coli bacteria (4 violates / 9 obs.).

Joynes Branch

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.37

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C12R-01-BEN Taylor Creek

Location: This cause encompasses the riverine portion of Taylor Creek, from the point where stream forks north of Rt 180

downstream to the confluence of UT below Rt 178.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use impairment is due to monitored impacts to the stream's benthic population. Assessment is based on biological benthic monitoring with VCPMI [2013: S=17.3 & 2010: S=11.9, F=9.7] at Station 7-TAY003.11.

Taylor Creek

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 0.90

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C12R-02-BEN **Bull Branch**

Location: This cause encompasses the riverine portion of Bull Branch, from headwaters near Rt 609 (Accomack Co. Airport)

downstream to confluence with eastern prong of upper Pungoteague Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use impairment is retained for the 2014 IR due to impacts to the stream's benthic population. Benthic impairment assessment is based on biological benthic monitoring noting MI [MI: S&F-03, S-04; SI: F-04] at DEQ (BIO) station

@ 7-BBR001.31.

Bull Branch Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life**

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.25

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C13E-02-BAC Nassawadox Creek - Lower

Location: This cause encompasses the lower mainstem of Nassawadox Creek. Portion of CBP segment CB7PH.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus bacteria data which exceeded the criteria. (5 violate / 32 obs.) at DEQ (AQM) station @ 7-NSS001.62. Use ID = VAT-C13E-02. This segment is not covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 9/20/2007.

Nassawadox Creek - Lower Estuary Reservoir River
Recreation (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 2.108

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C13E-11-SF2 Church Creek - Middle, UT North Cove [No TMDL]

Location: This cause encompasses the area of Elliotts Neck. Tributary to Church Creek - Middle, UT North Cove. Portion of CBP

seament

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is impaired due to the DSS shellfish direct harvesting condemnation # 085-185 A (effective 20111007).Not covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 9/20/2007. However, the

AU impairment can be nested sin

Church Creek - Middle, UT North Cove [No TMDL]

Fecal Coliform - Total Impaired Size by Water Type: 0.059

Estuary

(Sq. Miles)

Reservoir

(Acres)

River

(Miles)

Sources:

Shellfishing

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C13E-20-SF Nassawadox Creek - Middle, N. Shore Tribs

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 085-110 A, 10/7/2014.

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 085-110 A (effective 20111007). Not covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 10/20/2007.

Nassawadox Creek - Middle, N. Shore Tribs

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.140

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: C13R-01-BEN Taylor Branch - Occohannock Creek

Location: This cause encompasses Taylor Branch, from the confluence of two branches upstream of station downstream to the

confluence with Occohannock Creek.

City / County: Accomack Co. Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired due to impacts to the stream's benthic population. Assessment is based on biological benthic monitoring in 2010 using VCPMI scoring [2010_IM: S=11.9, F=9.7] at DEQ (BIO) station @ 7-TLR000.75.

Taylor Branch - Occohannock Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 2.31

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D01E-02-D0 Little Mosquito Creek

Location: This cause encompasses the upper and lower portions of the Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

Aquatic Life Use not supporting based on DO criteria exceedances with 5 violations / 35 observation at the downstream station. pH supports Aquatic Life Use with 0 violations / 35 observations. The data to assess the Aquatic Life Use is extrapolated from downstream station (DEQ-AQM station @ 7-LTM000.80).

Little Mosquito Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.208

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D01E-03-BAC Powells Bay

Location: This cause encompasses the entirety of Powells Bay. NW of Wallops Island, between Watts and Bogues Bays.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreational Use impairment is maintained for this assessment. Three data points from 2005 are supporting Enterococci. No new data since listing station therefore segment will remain impaired until new data is collected.

Powells Bay

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.596

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D01E-04-DO Swan Gut Creek

Location: This cause encompasses the entirety of Swan Gut Creek. From Virginia/Maryland state line downstream to Rivermile 0.13,

above the confluence with Chincoteague Bay.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use will remain impaired for the 2014 Assessment. Data was collected within Assessment window in year 2012. Five surface samples were collected. Will wait for additional monitoring to propose for delist of DO. Current DO violations

are 0 / 5.

Swan Gut Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.100

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D02E-01-DO Assawoman Creek

Location: This cause encompasses the entirety of Assawoman Creek. This Creek is North of Assawoman Island and discharges to

Nomans Bav.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired based on DO concentrations that exceed the criteria for this parameter with 9 violates/ 36 obs. At Station 7-ASW003.36. The upper portion of Assawoman Creek assessed using downstream monitoring at Station 7-

ASW003.36.

Assawoman Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.136

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D02E-11-SF Little Cat Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 099-135B (effective 2013-10-24).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish harvesting condemnation # 099-135B (effective 2013-10-24).

Little Cat Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.096

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D03E-07-BAC Wachapreague Channel

Location: This cause encompasses a portion of Wachapreague Channel. Portion below Bunting Point Road to boat launch. Segment

around area at Wachapreague Harbor.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

Recreational Use is not supported based on the Enterococci data which violates 2 out of 9 observations at DEQ station @ 7-WAS003.26 from 2012 IR. Current data is 1 viol / 5 obs.

WAGGOOS.20 HOITI 2012 IIV. Guitefit data is 1 viol / 3 obs.

Wachapreague Channel

Estuary
Reservoir
River
(Sq. Miles)
(Acres)
(Miles)

Enterococcus - Total Impaired Size by Water Type: 0.055

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D03E-08-DO Northam Creek

Location: This cause encompasses a portion of Northam narrows between Hog Neck Creek and Mud Narrows, below Assawoman

Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use impairment is retained due to dissolved oxygen concentrations from 2008 Assessment (3 violates / 3

obs.) below the criteria minimum.

Northam Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.028

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D03R-03-BEN Ross Branch

Location: This cause encompasses the Riverine section of Ross Branch, segment begins at headwaters extending downstream to start of tidal waters. Located south of Accomack. Tributary to Folly Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired due to impacts to the stream's benthic population. DEQ Streams Benthic-Macroinvertebrate Bioassessments using VCPMI at Station 7-RSS001.40.VCPMI [2014: F=26.4 2012: F=29.3, 2010: S=13.0, F=12.6] Site is often dominated by high numbers of scuds which drive down taxa richness scores. Site is possibly affected by agricultural runoff.

Ross Branch
Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 3.20

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D03R-04-BEN Unnamed tributary to Folly Creek

Location: This cause encompasses the headwaters downstream to start of tidal waters. Located east of Accomack, near Edge Hill

Cemetery.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on benthic VCPMI scores. Benthic population impacts were recorded at the following sample events: 7-XDE000.40 - VCPMI [2012: F=36.4] and [2014: F=50.4] and [2010_IM:S=14.1, F=54.0] and [2008: S=13.0, F=37.3] and [2007: S-12.2 and F = 29.7]. Observations during benthic data collection - Stream has a petroleum smell .

Unnamed tributary to Folly Creek

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

1.53

Sources:

Leaking Underground Storage Tanks Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D03R-05-BEN Rattrap Creek

Location: This cause encompasses the end of Finneys Creek near Locustville. Near Intersection of Drummond Rd and Locustville Rd,

approx. 2.6 mi.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the streams Benthic population as recorded at the following sample event: 7-RTT000.49 with VCPMI [IM_ 2014: S=35.3 2013: F=31.6 2010: S=23.2, F=26.8].

Rattrap Creek
Aquatic Life
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.73

Sources:

Source Unknown



3.13

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D03R-06-BEN North Fork

Location: This cause encompasses the north Fork of Parker Creek, Near Parker Neck, From the end of tidal waters crossing US

Route 13 to end of stream.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the benthic VCPMI scores collected at station 7-PNF001.98. Benthic Data IM [2011:S=39.4 F=10.0 2013: F=7.2 2014: S=16.4]. There is potential stress causing the low scores at this site. Physical habitat conditions may also be influencing diversity, as riparian zone width is suboptimal and there is noticeable sedimentation in the

North Fork Estuary Reservoir River
Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Sources:

Source Unknown



1.22

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D03R-07-BEN Custis Creek

Location: This cause encompasses the riverine portion of Creek off of Burtons Bay near Locustville.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is not supported based on the benthic macroinvertebrate data collected at Station 7-CUS004.08. Benthic data was evaluated using the VCPMI index. Data was collected in 2013 with S=17.5 and F= 15.5. This is a small first order stream on the eastern shore similar to Ross Branch in habitat. Custis Creek site has limited instream habitat for colonization of benthic organisms and may be subject to agricultural runoff from nearby farm fields. The stream seems to be dominated by midges and fingernail clams. Both values are below the 40 VCPMI criteria and therefore this station is listed as impaired.

Custis Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D04E-01-DO Red Bank Creek

Location: This cause encompasses all portions of Red Bank Creek. Tributary to Hog Island Bay.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use impairment is retained from 2008 Assessment. No new data within assessment window. Impaired (2 violates / 3 obs.) due to dissolved oxygen concentrations below the criteria minimum (4.0 mg/l).

Red Bank Creek
Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.003

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D04E-02-DO Unnamed tributary to Red Bank Creek

Location: This cause encompasses a portion of an unnamed Tributary to Red Bank Creek. Southeast of Marionville, near Brick House Neck. Segment from first branching of creek (RM 0.3) downstream to confluence with Red Bank Creek. DSS shellfish direct

harvesting condemnation

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use impairment is retained based on DO violations. Previous Assessment: The Aquatic Life Use is impaired due to dissolved oxygen concentrations (2 violates / 4 obs.) below the criteria minimum (4.0 mg/l).

Unnamed tributary to Red Bank Creek

Aquatic Life

Estuary (Sq. Miles) **0.009** Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins Cause Group Code: D04R-01-D0 Red Bank Creek

Location: This cause encompasses the area southeast of Marionville. Segment from headwaters downstream to end of tidal waters.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

The Aquatic Life Use is impaired for DO at Station 3-RBC003.87 with DO 5 viol /16 ob. pH is supported with 0 viol / 16 obs. Draft DO natural conditions evaluation for this impairment and Unnamed tributary to Red Bank Creek. Evaluate in 2018 IR

Red Bank Creek
Aquatic Life
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

1.36

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D04R-03-BEN Frogstool Branch

Location: This cause encompasses the area near Red Hill.

City / County: Accomack Co. Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Aquatic Life Use is impaired based on Benthic IM at Station 7-FRB001.94. VCPMI [2010_IM: S=24.9, F=38.8 2013: F=57.0

2014: S=18.3].

Frogstool Branch

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

4.27

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D04R-04-BEN UT to Mill Creek

Location: This cause encompasses the Unnamed trib to Mill Creek Stream. Stream is east of Treherneville crossing over Route 600.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The ALUS is not supported based on the benthic data collected in 2011 using the VCPMI. The Spring score was 20.9 and the Fall was 9.0. Habitat is adequate for colonization of a healthy benthic community, but pH is somewhat acidic and dissolved oxygen was very low in the spring. The stream was dominated by midge larvae, a frequent indicator of human disturbance.

UT to Mill Creek Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

1.48

Sources:

Source Unknown



River

(Miles)

(Acres)

(Sq. Miles)

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D05E-01-HG Oyster Slip (Harbor) - Upper

Location: This causes encompasses the area adjacent to Brockenberry Bay within upper portion of the harbor. Located in the town of

Oyster, east of Cheriton.

City / County: Northampton Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption is impaired based on Fish Tissue data collected for Mercury in Sandbar Shark in 2008.

Oyster Slip (Harbor) - Upper Estuary Reservoir

Mercury in Fish Tissue - Total Impaired Size by Water Type: 0.034

Sources:

Source Unknown

Fish Consumption



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D05R-01-BAC Taylor Creek

Location: This cause encompasses area from Penn Central RR crossing downstream to impoundment 0.1 mi. downstream of station.

Located northeast of Simpkins.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreation Use is impaired based on E.coli exceedance of the swimming criteria (17 violates / 23 obs.).

Taylor Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

1.26

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D05R-02-BAC Holt Creek

Location: This cause encompasses the area from headwaters downstream to start of tidal waters. Located east of Martins Siding.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impairment is retained with E.coli concentrations exceeding the instantaneous swimming indicator criteria with 2 / 5 and previously with 4 violates/ 12 obs at station 7-HLT002.08.

Holt Creek
Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.74

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D05R-03-BAC Holt Creek Unnamed Tributary

Location: This cause encompasses the area from Penn Central RR crossing near headwaters downstream to confluence with Holt

Creek. Located east of Martins Siding.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use impairment is retained based on Fecal Coliform data. Current E.coli data collected is 1 violates / 1 obs. Previous (2006 IR) TMDL ID = VAT-D05R-03.

Holt Creek Unnamed Tributary

med Tributary Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.42

Sources:

Recreation

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D05R-03-BEN Holt Creek Unnamed Tributary

Location: This cause encompasses the area from Penn Central RR crossing near headwaters downstream to confluence with Holt

Creek. Located east of Martins Siding.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the benthic data collected at 7-XDI000.88: IM VCPMI [2014: S=25.4] [2013: F=41.3] [2009_IM: S=8.6, F=48.4] Habitat is good at this site and there are no obvious point sources, so it is likely that non-point sources are responsible for impairment here. The scores at this site jump around a good bit with a tendency for higher scores in the fall indicating that seasonal effects are probably also being picked up by the metrics in addition to any anthropogenic effects.

Holt Creek Unnamed Tributary

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

1.42

Sources:

Source Unknown

Final 2016



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D06E-01-DO Magothy Bay - Lower

Location: This cause encompasses the area east of Skidmore Island.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on data from 2008 Assessment for the DO concentration exceeding the criteria for this parameter (4 violates / 21 obs.). Now data from 01 and 02 drop out therefore 2 /5 violate. Can not delist DO.

Magothy Bay - Lower Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.037

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D06E-02-PCB Raccoon Creek

Location: This cause encompasses Raccoon Creek. The area southwest of Magothy Bay.

City / County: Northampton Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on Fish Tissue data collected for PCBs with an observed effect for arsenic. Station 7-RAC000.00 is impaired for PCBs in FT found in Bass, Trout and Blue Crab.

Raccoon Creek
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type: 0.004

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D06R-01-PH Mill Creek

Location: This cause encompasses the area at the start of Mill Creek upstream of Penn central RR crossing and ends downstream of

Rt 600 at the beginning of the impoundment upstream of tidal waters. Located north of Capeville.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5A

The Aquatic Life use is impaired based on pH concentrations exceed the criteria for this parameter (4 violates / 23 obs.) at DEQ station @ 7-MCR002.00.

Mill Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

2.23

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D06R-02-BAC Narrow Channel Branch

Location: This cause encompasses the area from headwaters downstream to start of tidal waters. Located east of Bayview.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired with 3 violations / 5 observations at Station 7-NCB000.97.

Narrow Channel BranchEstuaryReservoirRiverRecreation(Sq. Miles)(Acres)(Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.84

Sources:

Source Unknown



1.84

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D06R-02-BEN **Narrow Channel Branch**

Location: This cause encompasses the area from headwaters downstream to start of tidal waters. Located east of Bayview.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use impairment is retained. No new data within the 2016 assessment window. The Aquatic Life Use is impaired due to impacts to the stream's benthic population. DEQ (Bio) monitoring determines impairment by benthic assessment ratings of SI (spring 2001) & MI (fall 2001).

Narrow Channel Branch **Estuary** Reservoir River (Miles)

(Sq. Miles) (Acres) **Aquatic Life**

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D06R-02-DO Narrow Channel Branch

Location: This cause encompasses the area from headwaters downstream to start of tidal waters. Located east of Bayview.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired based on 2011 and 2012 data for DO that exceed the WQS with 2 viol/ 6 obs. Additional monitoring is requested.

Narrow Channel Branch

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

1.84

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D06R-03-BAC Tommy's Ditch

Location: This cause encompasses the entirety of Tommy's Ditch west of Kiptopeke State Park.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on E.coli criteria exceeded (7 viol / 15 obs) at DEQ station @ 7-TOM001.73.

Tommy's Ditch

Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.44

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D07E-02-BAC Lake Rudee - Upper

Location: This cause encompasses the upper portion of Lake Rudee, from end of Owl Creek downstream to approx. RM 0.4

(upstream of confluence of Lake Holly with Rudee Inlet canal).

City / County: Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use impairment is retained for the 2016 Assessment. Data from the 2012 IR was collected in 2005 & 2006. Listing impairments dropped off for this assessment. Now data from monitoring in 2012 have 0 viol / 7 obs. But a larger data set is needed to determine if Recreational Use can be delisted.

Lake Rudee - Upper

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.099

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D07E-02-SF Lake Rudee - Upper

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 073-074A (effective 2013-06-11).

City / County: Virginia Beach City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 073-074A (effective 2013-06-11)

Lake Rudee - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: **0.099**

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D07E-04-BAC Owl Creek - Upper & Lower

Location: This cause encompasses the Headwaters of Owl Creek to tributary to Lake Rudee, located west of Lake Christine.

City / County: Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired due to Enterococcus bacteria concentrations exceeding (2 violates / 6 obs.) TMDL due date same as original FC impairment.

Owl Creek - Upper & Lower

Recreation

Estuary (Sq. Miles)

Reservoir (Acres)

oir River s) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.025

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D07E-04-DO Owl Creek - Upper

Location: This cause encompasses the upper portion of Owl Creek a tributary to Lake Rudee, located west of Lake Christine.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired due to dissolved oxygen concentrations at station 7-OWL000.77 and 7OWL-2-VAMSC with 2 violates / 6 obs. and 5 viol/ 9 obs below the criteria minimum (4.0 mg/l). This TMDL ID (VAT-D07E-05) is added for the 2006 IR.

Owl Creek - Upper Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: **0.005**

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D07E-04-SF Owl Creek - Upper & Lower

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 073-074A (effective 2013-06-11).

City / County: Virginia Beach City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 073-074A (effective 2013-06-11).

Owl Creek - Upper & Lower Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.025

Sources:

Source Unknown



Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code: D07E-10-SF Lake Rudee - Lower and Lake Wesley

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 073-074 A, 6/11/2013.

City / County: Virginia Beach City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfish Use is impaired based on DSS Condemnation # 073-074 A effective date 2013-06-11.

Lake Rudee - Lower and Lake Wesley

Shellfishing (Sq. Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.060

Estuary

Reservoir

(Acres)

River

(Miles)

Sources:

Source Unknown